

THE MISSING FRÉMONT CANNON—AN ECOLOGICAL SOLUTION?

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ABSTRACT

Donald Jackson and Mary Lee Spence (1970) proposed that the cannon John Charles Frémont abandoned on 29 January 1844 is to be sought in the Mill Creek Canyon area of the Sierra Nevada, while Ernest Allen Lewis (1981) suggests the site was on an unnamed peak ("Mt. 8422") above West Walker River in the Sweetwater Mountains of northern Mono Co., California. Both suggestions fail to account fully for the descriptive details given in Frémont's 1845 report, especially as they relate to geological, ecological, topographic and vegetational features. We propose that Frémont's men abandoned his twelve-pound howitzer in a cache near the base of a steep hill a short distance north of Cottonwood Meadow along Cottonwood Creek in northwest quarter of Sec. 23, T.7N., R.23E. This site is on the western edge of the Sweetwater Mountains in the Toiyabe National Forest.

On 29 January 1844, John Charles Frémont and his men abandoned a small cannon on the western edge of the Sweetwater Mountains in northern Mono County, California. The fate of this twelve-pound mountain howitzer¹ has been the subject of several local legends, sought after for years, had geographical place-names assigned to areas where the cannon was believed to have been left, and has been discussed in numerous articles (e.g., Jackson 1967, Russell 1957) and two recent books (Jackson and Spence 1970, Lewis 1981). Lewis tells an appealing story of the Frémont cannon and of certain other cannons that were not Frémont's but proclaimed by museums and assorted charlatans to be the very one that he transported to California. In our opinion, both books fail to present a realistic view of the probable route of the Frémont (1845) expedition on the critical days of 26–29 January, when the howitzer was abandoned. We propose an alternative route and suggest a probable site where it was left.

On 26 January, Frémont and Kit Carson made a reconnaissance of the country that lay ahead of the party. The expedition was camped just downstream from the junction of the East Walker River and Swauger Creek, about four miles north of the present-day town of

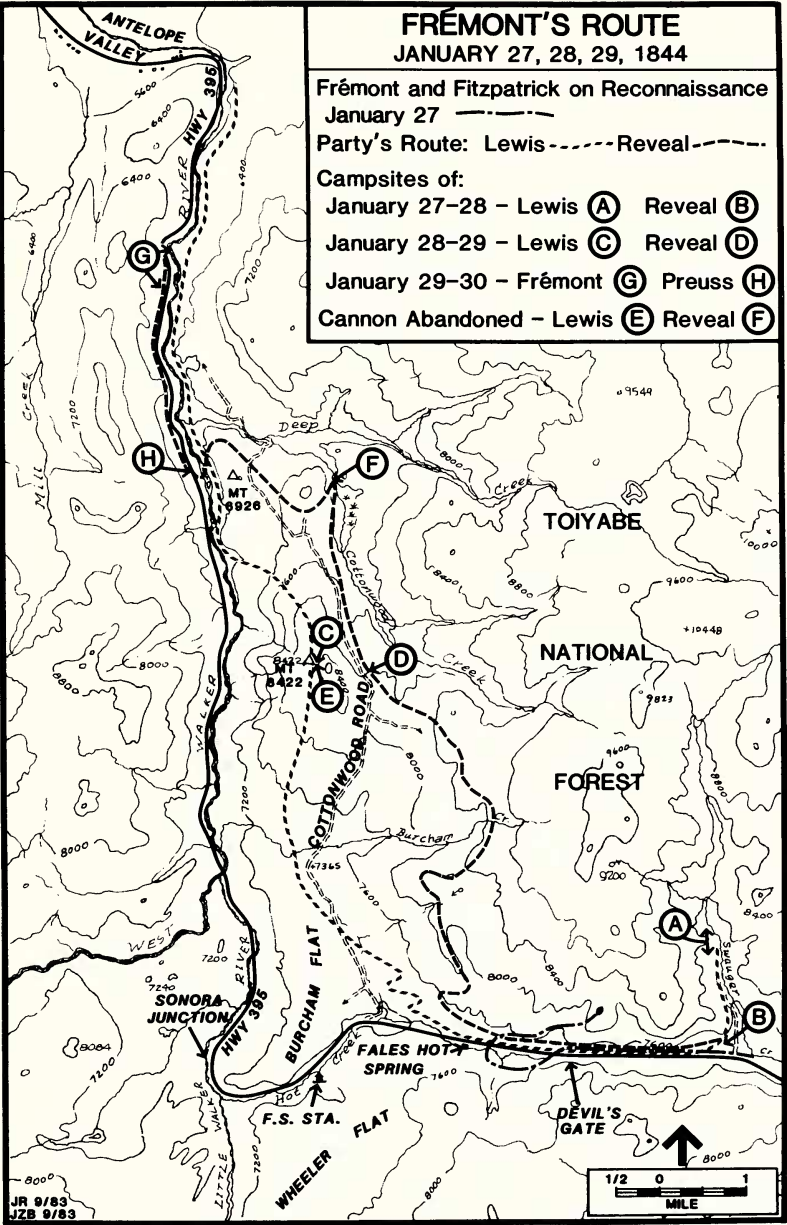


FIG. 1. Frémont's route, 27-29 January 1844.

Bridgeport.² Frémont wrote that "one of its branches [East Walker River]" was "coming directly from the south," and the other branch [Swauger Creek], "issued from a nearer pass, in a direction S. 75° W., forking [into Robinson and Buckeye Creeks] at the foot of the mountain, and receiving part of its water from a little lake."³ Frémont and Carson went up Swauger Creek and entered Huntoon Valley probably on the north side of the creek just northwest of the former Bridgeport Ranger Station. Frémont states that they went in a "northwesterly direction up the valley [Huntoon], which here [at Huntoon Campground] bent to the right The little stream grew rapidly smaller, and in about twelve miles we had reached its head,⁴ the last water coming immediately out of the mountain on the right [south flank of the Sweetwater Mountains]; and this spot we selected for our next encampment [Fig. 1]." Later, Frémont wrote: "To the left, the open valley [Pimentel Meadows] continued . . . forming a beautiful pass [Devil's Gate] . . . which we deferred until the next day"

On 27 January, Frémont and Thomas Fitzpatrick went quickly ahead leaving Carson to follow with the camp. The two men traveled rapidly up Huntoon Valley and "Arriving at the head of the stream, we began to enter the pass—passing occasionally through open groves of large pine trees [*Pinus jeffreyi*], on the warm side of the defile [north side of Pimentel Meadow, or the south-facing slope] Continuing along a narrow meadow [Pimentel], we reached in a few [two] miles the gate of the pass [Devil's Gate], where there was a narrow strip of prairie, about fifty yards wide."

Frémont and Fitzpatrick passed through Devil's Gate and onto the headwaters of Hot Creek in the West Walker River drainage. "On either side [of Devil's Gate] rose the mountains, forming on the left [Bush Mountain] a rugged mass, or nucleus, wholly covered with deep snow, presenting a glittering and icy surface. At this time, we supposed this [Devil's Gate, the Sweetwater Mountains to the north and crest of the Sierra Nevada extending southward] to be the point into which they [the mountains] were gathered between the two great rivers [San Joaquin and Sacramento], and from which the waters flowed off to the [San Francisco] bay. This was the icy and cold side of the pass [they were on the west side] On the left, the mountains [Mahogany Ridge] rose into peaks; but they were lower and secondary, and the country had a somewhat more open and lighter character. On the right were several hot springs [Fales Hot Springs]."

As Frémont and Fitzpatrick moved into the area where the hot springs would have been seen on the right, they were almost a mile west of Devil's Gate and three-tenths of a mile east of Fales Hot Springs. In going through Devil's Gate, which is a massive granodiorite outcrop, Frémont was impressed "by the majesty of the

mountain, along the huge wall of which we were riding." Frémont next states: "Here there was no snow [we believe "here" means the hot springs area]; but immediately beyond was a deep bank [into the meadow below the north edge of Wheeler Flat], through which we dragged our horses with considerable effort. We then immediately struck upon a stream [Hot Creek], which gathered itself rapidly, and descended quick; and the valley [of Hot Creek] did not preserve the open character of the other side [e.g., Huntoon Valley on the east or "other" side of Devil's Gate], appearing below to form a cañon."

Frémont then writes that they "climbed one of the peaks on the right, leaving our horses below; but we were so much shut up, that we did not obtain an extensive view." We believe the men climbed the steep ridge north of the present U.S. Highway 395 on the northwestern edge of Devil's Gate (Fig. 1). Here they would not have had an "extensive view." Frémont wrote that the "valley of the stream [Hot Creek] pursued a northwesterly direction, appearing below to turn sharply to the right, beyond which further view was cut off." From their likely vantage, the rim of Burcham Flat would have cut off the Sonora Junction area and the West Walker River as it flows from Pickle Meadows to the west. Frémont would have seen Hot Creek flowing westerly, then making a sharp turn to the right and going north into West Walker Canyon.

Jackson and Spence suggest the men climbed a peak called Mt. 8422 some three miles north of Burcham Flat (Fig. 1), and some five airline miles north-northeast of Sonora Junction. This is exceedingly unlikely since Mt. 8422 provides an excellent vista of much of the region. Lewis is of the opinion the men climbed "the steep escarpment up to Burcham Flat." Looking at Lewis's map, we believe he places their climb at a point above the gauging station some 1.2 mi north-northeast of Sonora Junction. Had this been the case, Frémont would have seen the West Walker River coming down from the Sierra Nevada. As no mention is made of this river (nor is it shown on Preuss's maps of the region made for Frémont's report), it is unlikely they were ever aware of this important branch of the Walker River.

Frémont states that after viewing the countryside from his vantage point he "resolved to continue our road the next day down this valley, which we trusted still would prove that of the middle stream between the two great rivers [San Joaquin and Sacramento]." It was clear to any observer that the crest of the Sierra Nevada to the west would not have allowed a river to flow through to the Pacific. Frémont was looking for the fabled Buenaventura River, and he hoped the small stream he was on was one of its headwaters and that by following this stream to the north he would find his way through the Sierra Nevada. From Frémont's view of the territory beyond Devil's Gate, the valley of Hot Creek and its "right" turn, West

Walker Canyon, would certainly have been an attractive route. By cutting across the eastern edge of Burcham Flat, as he would the following day, Frémont could avoid deep snow and the impassability of Walker River Canyon.

Frémont completes his report of the day by saying that toward "the summit of this peak, the fields of snow were four or five feet deep on the northern side" At that time of the year, these conditions would surely apply to the summits above Devil's Gate, and equally be true of Burcham Flat and Mt. 8422.

The camp that evening was established on the north side of Pimentel Meadow at the point where Swauger Creek enters Huntoon Valley (Fig. 1). The slopes on both sides of Swauger Creek are south-facing and essentially devoid of conifers. The sagebrush (*Artemisia tridentata*) covered slopes were nearly snow-free and likely harbored some grass for the animals. Lewis is of the opinion Frémont established his camp "one or two miles up the canyon [of Swauger Creek] from U.S. 395." The aspen (*Populus tremuloides*) dominated canyon floor with conifers interfingering onto the bottom-lands would have been heavily choked with snow. Passage up and into such a canyon would have been difficult. The north-south trending exposures would not have afforded pasture for the party's horses and mules.

The events of 28 January are only briefly described by Frémont. The camp went through Devil's Gate and traveled twelve miles, making camp "on a high point where the snow had been blown off, and the exposed grass afforded a scanty pasture for the animals." During the day, the "snow and broken country together made our travelling difficult: we were often compelled to make large circuits, and ascend the highest and most exposed ridges, in order to avoid snow, which in other places was banked up to a great depth." Jackson and Spence are of the opinion that Frémont crossed the West Walker River and climbed up onto an 8600-foot peak in the Sierra Nevada south of Grouse Meadow on the west side of West Walker Canyon and south of Mill Creek. Frémont does not report crossing any river, nor is such a crossing shown on Preuss's maps.

In graphic terms, Lewis (p. 99) describes the party's journey of 28 January. He tells how Frémont and his men nearly exhausted themselves climbing steep embankments and criss-crossing exposed ridges to reach the south end of Burcham Flat by early afternoon. The actual topography along this route, however, belies his description. Burcham Flat is only about 150 feet higher in elevation than Hot Creek at Wheeler Guard Station, and just east of this Forest Service post there is a shallow draw where the party could easily have ascended onto the flat. Above that point, the elevation between the stream's edge and that of the flat is even less. Lewis's map shows the Frémont route as turning northwardly at Fales Hot Springs (where access to the flat is not difficult and thus contradictory of his

text), crossing the middle of Burcham Flat, and climbing the south slope of Mt. 8422, where a camp was established "in the saddle near the top of the mountain."⁵

We agree that Frémont, to avoid deep snow, had to ascend the highest and most exposed ridges. Our proposed route (Fig. 1) accepts Frémont at his word. Our experience with Burcham Flat in the winter indicates that the snow on the flat would have been deep and the area difficult to traverse. The terrain over which Frémont would have passed as suggested by Lewis is shown in two photographs on page 92 of his book. They depict a fairly moderate slope over a distance of two miles. The average gradient is only ten percent between Burcham Creek (7400 ft) and the saddle of Mt. 8422. The topography to the east and north of the flat, where we believe the expedition traveled, is one of "exposed ridges" and "steep ascents" compelling "large circuits" which fits Frémont's characterization of his travel that day.

Lewis places Frémont's camp in a small saddle on his Mt. 8422 above West Walker River. We believe Frémont came around toward "Mt. 8422" from the southeast, following the ridges, and camped in the saddle east of the mountain at Cottonwood Pass.

The Cottonwood Pass camp for the night of 28–29 January might have been in the pass itself, where the prevailing winds would have exposed some grass for the animals, or in a somewhat more protected site less than half a mile to the east. At the latter place, the snow might have been deeper, but the camp would have had some protection from the wind. There was ample firewood in both sites consisting mainly of aspen and Rocky Mountain juniper [*Juniperus scopulorum*]. Frémont speaks of the camp having "scanty pasture" for his animals, and this leads us to suggest the camp was in the pass.⁶

The campsite suggested by Lewis is exposed and without tree cover, an unlikely camp for Frémont to have selected given the protection and cover provided at Cottonwood Pass. The rocky saddle proposed by Lewis does harbor some grass, but the swale, in our opinion, would have been covered with deep snow and thus what grass might have been present would have been buried. The pass could have been seen by Frémont even if he had traveled northward across Burcham Flat as suggested by Lewis. Looking at "Mt. 8422" from the south, Cottonwood Pass is clearly observable. The small saddle on the western slope can be seen as well, but Cottonwood Pass, at 8066 ft elevation, is certainly a more inviting campsite than the western saddle on "Mt. 8422," nearly 250 ft higher.

Frémont reports that they "did not succeed in getting the howitzer into camp" the evening of the 28th, and thus a party was sent back on the 29th to get it. Some time was required to "bring up the gun" While this was being done, Frémont, Fitzpatrick "and a few

men" left the camp and "followed a trail down a hollow where the Indians had descended, the snow being so deep we never reached the ground . . . when we reached a little affluent to the river at the bottom, we suddenly found ourselves in presence of eight or ten Indians."

If Frémont was on the Sierra Nevada above Grouse Meadows as proposed by Jackson and Spence, he would have had to cross the meadows before descending Mill Creek and encountering the Indians. Frémont makes no mention of this large expanse of several hundred acres. The campsite suggested by Jackson and Spence is some twelve miles from the Swauger Creek campsite on a straight line path down Hot Creek, across West Walker River and up to the saddle above Grouse Meadows. Because Frémont states his route was circuitous, the Jackson and Spence route seems unlikely. The route we propose from the Swauger Creek camp to the Cottonwood Pass camp measures closer to ten miles than twelve, which suggests Frémont's actual route was even more circuitous than we have indicated.

Lewis states that Frémont and his men "rode down the north face of the mountain along a gradual trail to the [West Walker] river." No such route is described by Frémont.

It is unlikely that the local Indians would have established a trail along the north slope and ridge of "Mt. 8422" as proposed by Lewis. It is more likely the trail was through the pass and down the hollow to Cottonwood Creek, the approximate route of today's Cottonwood Road, and that this was the trail followed by Frémont in the belief that it would lead to Indian villages in the valley [Antelope Valley] he had seen from the vicinity of his encampment.⁷ While it is true one can see more of Antelope Valley to the north from the upper reaches of "Mt. 8422," the western slopes of the valley can still be seen from Cottonwood Pass. Likewise, a walk from the pass toward the summit of "Mt. 8422" would not have been too difficult. From there Frémont would have had an excellent view of Antelope Valley, as suggested by Lewis.

We believe the "little affluent" Frémont mentions is Cottonwood Creek. Lewis believes the "little affluent" is an unnamed spring and runoff channel found on the northwest side of Mt. 8422. Lewis's map shows Frémont's route as along the western edge of "Mt. 8422" and the ridge (not on the crest of the ridge, as given in the text) going toward an unnamed mountain peak illustrated as similar in size to "Mt. 8422." Because no such mountain is to be found, we suspect Lewis's unnamed peak is Mt. 6926, a point south of Deep Creek on the ridge north of Mt. 8422. On the western slope between elevations 8422 and 6926 is an intermittent stream that reaches the West Walker River at Toll House Campground. This is on the route

suggested by Lewis and we believe is what he illustrates as the "little affluent."

Frémont presented gifts to the several Indians he found "on the hill side above our heads." Such a locality description is possible for our proposed Cottonwood Creek route, and would place this incident where the canyon narrows a short distance down stream from Cottonwood Meadows at an elevation of about 7100 ft. Lewis states correctly that the upper end of his spring-fed draw is "twenty foot wide and ten foot deep." It is hardly likely that Frémont would have elected to enter such a narrow draw, especially with snow on the ground. Furthermore, it is not a place where the Indians could wait "above our heads" as stated by Frémont. The Cottonwood Creek route is much wider, with elevated slopes along both sides of the stream. If Frémont met the Indians in the canyon below Cottonwood Meadow as we suggest, where the timbered slopes are high and steep, and where the distance between the two slopes is more than one hundred feet, the Indians would have been "out of reach" and would have "thought themselves safe" as he describes.

At this point Frémont makes a critical statement regarding the fate of his howitzer: "The principal stream [Cottonwood and Deep Creeks] still running through an impracticable cañon, we ascended a very steep hill, which proved afterwards the last and fatal obstacle to our little howitzer, which was finally abandoned at this place."

Jackson and Spence are of the opinion the cannon was left on Mill Creek. An examination of the Mill Creek area provides places where Frémont could have had Indians above him and out of reach, but no steep hills that would have to be ascended on 29 January. Also, Frémont would not have found in Mill Creek an "impracticable cañon" which would have forced him to leave the drainage. Likewise, Jackson and Spence (p. 623) state that Frémont's expedition departed the mountains in Antelope Valley "which it entered from the mouth of West Walker Canyon." To accomplish this, the party would have had to climb over the high ridge separating Mill Creek and the West Walker River, an unnecessary passage and much more difficult than simply continuing down Mill Creek.

Lewis says that Frémont followed his "little affluent" down to the West Walker River. Frémont clearly does not say this. Upon seeing or perhaps learning from the Indians of the difficulties of taking animals farther down Cottonwood Creek and into Deep Creek, he "ascended a very steep hill" to get out of the "little affluent." If our route is correct then Frémont and his men turned westward where the canyon narrows below Cottonwood Meadows, and ascended the southeast-facing slope. That steep slope is covered with single-leaf pinyon (*Pinus monophylla*). There are no signs of fire and the trees are of an age estimated to be in excess of 250 years. The sideling

ground and undulations in the snow would have made pulling the wheeled cannon difficult. Likewise, the descent into the Walker River Canyon along a timbered slope with a mixed stand of pinyon and Jeffrey pine (which also show signs of considerable age and no fire), would have made getting the cannon down to the river difficult. By climbing out of Cottonwood Canyon, Frémont would avoid Deep Creek Canyon, and by crossing over the ridge of his "steep hill" he could get onto a southwest-facing slope and thus avoid deep snow.

Frémont never saw the howitzer's last resting place, nor does he state in what condition it was left. Lewis speculates the cannon was left unattended at the campsite on "Mt. 8422," and that it "was a jubilant group that rode away from the little howitzer, sitting atop its carriage in a small meadow . . ." Frémont's own words clearly refute this statement.

Frémont says that the howitzer was "left by Mr. Preuss in obedience to my orders." Lewis suggests that Carson was sent "back to the camp" with instructions to leave the cannon, but most likely Carson was put in charge of the camp party and was moving ahead of Preuss and the cannon party who were, as Frémont reports, bringing the cannon up from where it had been left the day before. We speculate that Frémont's orders, if any were actually given at the time, were to attempt to get the cannon beyond "this place," but if impossible, his men were to abandon it.⁸ Perhaps a written message was left on the trail, a common practice among wilderness travelers.

Lewis recounts Preuss's dislike for the howitzer, but Frémont, if not Preuss, had a military man's attachment to the cannon (see Note 1). It is unlikely they would have abandoned such a weapon to an unknown fate. With the party were mountain-men skilled at concealing bales of fur, traps and other equipment. Because Frémont states "I reluctantly determined to leave it [the howitzer] there *for the time* [our emphasis]," it is reasonable to speculate that the howitzer was disassembled and, along with its ammunition, safely cached.

We believe the site of the cache for the cannon and its ammunition was situated near the bottom of the steep side-slopes below Cottonwood Meadow at the point Frémont abandoned Cottonwood Creek. The "very steep hill" is the one in the northwest quarter of Sec. 23, T.7N., R.23E. (Mt. Diablo Base and Meridian). It has a gradient of 30 to 35 percent, which could be considered "very steep," especially in the winter and with laden horses and mules. The soil in this area is of decomposed granite and, on the south-facing slope, it would have been easy to dig rapidly a suitable cache for the disassembled howitzer. If the cannon and ammunition had been left exposed, certainly some remains would have been discovered. Cattlemen, sheepherders and hunters could have traveled in the area unaware of a hidden cache, but if it were unburied some evidence of the cannon would have been found. We believe that downslope slough-

ing of weathering rock and soil have continued to cover the cache and that this accounts for the lack of physical evidence of the cannon at this site.

After describing his ascent from Cottonwood Creek, Frémont states that "We passed through a small meadow a few miles below, crossing the river . . . and, after a few more miles of very difficult trail, issued into a larger prairie bottom, at the farther end of which we encamped, in a position rendered strong by rocks and trees. The lower parts of the mountain were covered with nut pine [*Pinus monophylla*]." He indicates that camp was established in the afternoon and in his table of distances states the party traveled seven miles this day.

The presence of single-leaf pinyon, as nut pine is now called, and the description of a "larger prairie bottom," leads us to believe that Frémont and his small party camped at China Garden, today a sagebrush flat with scattered conifers. Given the heavy grazing and other disturbances that have happened in this area since the 1890s, the grasses Frémont saw have been replaced with sagebrush and other shrubs, thus changing the vegetational characteristics of the area. We suspect that Frémont came down to the West Walker River and crossed it in the vicinity of Shingle Mill Flat.⁹ This we take to be Frémont's "small meadow."

Preuss and his group did not advance as far as China Garden, "but encamped in the upper meadow," which we believe to be Shingle Mill Flat. If our route is correct, the distance from Cottonwood Pass down Cottonwood Creek, across the West Walker River, and then down the river to China Garden is seven miles as noted by Frémont. The Lewis route is only five miles, whereas that suggested by Jackson and Spence is a minimum of ten airline miles.

The events of the 29th were trying for Frémont and his men. The cannon was left not in the Sierra Nevada but on the western edge of the Sweetwater Mountains, geologically and floristically a part of the Great Basin (Cronquist et al. 1972, Harper and Reveal 1978, Reveal 1980). Lewis believes the cannon is yet to be discovered. He is probably correct. We suggest that the route proposed here (Fig. 1) best fits Frémont's own description and that the routes indicated by Jackson and Spence and by Lewis fail to account for all the factors described by him. We also suggest Frémont and his men cached the cannon and its ammunition. Perhaps the howitzer was found by Indians who moved it elsewhere or even destroyed it as local legend tells. However, some of the five hundred pounds of ammunition ought to be in the area of the original cache and likely might be discovered by a careful, and we must add, *legal* search.¹⁰

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on the western slope of the Sweetwater Mountains in the 1980s, and by National Science Foundation grants GB-22645 and BMS75-13063 to the junior author for ongoing studies on the flora of the Intermountain West. Our initial investigations began in 1958 (the subject of a "term paper" at Sonora Union High School, California) and continued in 1960 when working for the U.S. Forest Service at Lee Vining (*pater*) and Wheeler Guard Station (*filius*). We wish to thank Joan Bonin of RECON, Inc., San Diego, California, for providing valuable assistance in preparing the map, and the Bridgeport Ranger District for use of aerial photographs. This is Scientific Article A3840, Contribution No. 6820 of the Maryland Agricultural Experiment Station.

NOTES

¹ Frémont obtained the field piece "from the United States arsenal at St. Louis, agreeably to the orders of Col. S.W. Kearney." This acquisition was deemed unnecessary by Col. J. J. Abert, head of the Bureau of Topographic Engineers, and a letter was sent to Frémont asking him to justify his actions (see Jackson and Spence 1970, for its text). According to Frémont's wife, Jessie, the daughter of Missouri Senator Thomas Hart Benton, she intercepted the letter and in a dramatic note urged her husband to depart immediately. Jackson (1967) questions that this event ever happened. Frémont clearly had no authority to request or take a field piece into Spanish California, an action that could have been considered an act of war. The howitzer was placed "under the charge of Louis Zindel, a native of Germany, who had been 19 years a non-commissioned officer of artillery in the Prussian army . . ."

² The junction of the two streams (and others) is now covered by the waters of Bridgeport Reservoir.

³ Although Frémont used the singular, we believe he is referring to Twin Lakes. Robinson Creek arises from these lakes. We are not certain how he learned of any lake, but it is possible Indians told him. The maps of the expedition do not show such a lake. Meadow irrigation in Bridgeport Valley has changed greatly the configuration of the four streams. See USGS 1911 Bridgeport Quadrangle.

⁴ Lewis's map shows that Frémont and Carson rode to the little spring tributary to Swauger Creek in Sec. 8, T.6N., R.24E. This spring is at 9200 ft, 1800 ft in elevation above Pimentel Meadow. Had the men made such a difficult climb, certainly it would have been reported.

⁵ Mt. 8422 as defined by Lewis (and maintained here for purposes of consistency) often refers to the entire elevated area north of Burcham Flat and west of Cottonwood Pass. USGS point 8422 on the Fales Hot Springs Quadrangle is actually a small nob above West Walker River and west of an unnamed, higher, north-south trending ridge that is approximately 8560 ft in elevation. Evidently, this higher ridge is Lewis's Mt. 8422, thereby causing some confusion in his book. When we refer only to the higher ridge and not the entire mountain top, we use "Mt. 8422." Lewis's camp was in a saddle between 8422 and 8560.

⁶ An examination of our proposed campsites for this night indicates there was a much better stand of aspen/juniper in Cottonwood Pass when Frémont was there. The reduction of tree cover in the area probably has been due to livestock use and sheep trailing through the pass.

⁷ Frémont describes "yellow spots" in Antelope Valley to the north. Such spots are still visible today. They are the grassy western slopes above the valley floor and west of U.S. Highway 395.

⁸ Lewis suggests Frémont sent Carson back to the morning camp with his orders and that the "courier probably arrived in camp at about the same time as the cannon party returned with the cannon." There is a small basin or flat on top between Mt. 8422 and the higher ridge to the east. This was both Lewis's camp and where he suggests the howitzer was left.

⁹ Preuss's maps have been criticized for their lack of details concerning the critical days of 26-30 January 1844. We disagree. Preuss's maps (see maps 3 and 5 in Jackson

and Spence) clearly show Bridgeport Valley and the route up Huntoon Valley, where the party turned westward toward Devil's Gate. Swauger Creek is shown to continue northward onto the southern flank of the Sweetwater Mountains. The mapped route shows the expedition going through the pass down to the Little Walker River, which arises from the south. West Walker River, which comes from the Sierra Nevada to the west, is not shown. The route then follows the edge of the mountains east of West Walker River, not in the mountains west of the river as suggested by Jackson and Spence. The two maps differ slightly in this respect. The 1845 map shows the route along the immediate bank of the river, making three crossings, and with two campsites shown in the canyon. On a later map released in 1848, no camps are shown, and the route is east of the river, seemingly—in part—to be in the mountains. Both maps indicate Frémont crossed the river at the mouth of the canyon, but we believe he crossed only once and then in the vicinity of Shingle Mill Flat. Lewis's map also shows a route down the east side of the river, and although his location can be supported by the Preuss maps, Frémont states he crossed the river upon reaching it. The east bank of the river defies passage today and it was probably an impossible route also in Frémont's day.

It should be noted that on 1 February, Frémont, then on the East Carson River in Carson Valley, gave his latitude as 38°37'38". This is an error or a misprint: it should be 47', as indicated by Preuss's maps. No doubt the confusion reported by Jackson and Spence regarding the placement of Frémont's camp this night is due to this error.

¹⁰ Any search activity for the Frémont cannon that would involve surface disturbance, excavation or disturbance of artifacts must be authorized by an archaeological permit issued by the U.S. Forest Service, the land managing agency, via U.S. Department of Interior under the provisions of the National Antiquities Act of 1906 and the Archaeological Resources Protection Act of 1979 [16 U.S.C., Sec. 470aa, et seq.].

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